Mark Scheme (Results)

Summer 2024

Pearson Edexcel
GCE Psychology (9PS0)
Paper 3: Psychological Skills

Edexcel and BTEC Qualifications

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Summer 2024
Question Paper Log Number 75500
Publications Code 9PS0_03_2406_MS
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General Marking Guidance

- All candidates must receive the same treatment. Examiners must mark the first candidate in exactly the same way as they mark the last.
- Mark schemes should be applied positively. Candidates must be rewarded for what they have shown they can do rather than penalised for omissions.
- Examiners should mark according to the mark scheme not according to their perception of where the grade boundaries may lie.
- There is no ceiling on achievement. All marks on the mark scheme should be used appropriately.
- All the marks on the mark scheme are designed to be awarded. Examiners should always award full marks if deserved, i.e. if the answer matches the mark scheme. Examiners should also be prepared to award zero marks if the candidate's response is not worthy of credit according to the mark scheme.
- Where some judgement is required, mark schemes will provide the principles by which marks will be awarded and exemplification may be limited.
- When examiners are in doubt regarding the application of the mark scheme to a candidate's response, the team leader must be consulted.
- Crossed out work should be marked UNLESS the candidate has replaced it with an alternative response.

Section A: Methods

Question Number	Answer	Mark
1(a)	AO2 (2 marks), AO3 (2 marks) Candidate responses have to be drawn from evidence presented in Table 1. One mark for identification of each conclusion (AO2). One mark for justification of each conclusion (AO3). For example: • The women found the man alone more extravert than when holding a cat (1) which is shown as he was rated on average as 4.23 alone but lower on extraversion at 2.96 when holding a cat (1). • The women found the man holding a cat as more agreeable than the man without a cat (1). This is shown by a higher average rating of 4.67 out of 7 when holding a cat compared to 3.59 when alone in the picture (1). Look for other reasonable marking points. Answers must relate to the scenario. Generic answers score 0 marks.	(4)

Question Number	Answer	Mark
1(b)	AO2 (4 marks)	(4)

Participant	Likelihood of adding the man alone as a friend	Likelihood of adding the man with a cat as a friend	Difference	Rank	Rank if positive	Rank if negative
A	7	5	2	4	4	
B	8	7	1	2	2	
C	5	6	-1	2		2
D	10	3	7	7	7	
E	7	7	0	-	-	-
F	4	5	-1	2		2
G	6	3	3	5	5	
H	6	2	4	6	6	
				Total:	24	4

One mark for accurate completion of difference column
One mark for accurate completion of ranked difference column
One mark for accurate calculation of sum of both ranks
One mark for correct value of T = 4

Question Number	Answer	Mark
1(c)	AO2 (2 marks), AO3 (2 marks) One mark for identification of a strength/weakness of using a questionnaire for the pets and social media study (AO2). One mark for justification of each strength/weakness of using a questionnaire for the pets and social media study (AO3). For example: Strength • The questionnaire asking about the personality traits of the man in the pictures is standardised so could be repeated with other participants to test for reliability (1) as the people responding will answer the same likert-style statements from 1-7 regarding how extravert they believe the man to be, so they can be compared and their responses can be checked for consistency (1). Weakness • The questionnaire regarding the two pictures of the man used closed-ended questions, only collecting quantitative data about his personality characteristics, so it lacks validity (1) so it would give limited insight into the participant judgement of his personality as the researchers would not know the underlying reasons why they find the man with and without the cat more or less extravert (1). Look for other reasonable marking points. Answers must relate to the scenario. Generic answers score 0 marks.	(4)

Question Number	Answer	Mark
2(a)	AO2 (2 marks) Up to two marks for description of a using a stratified sampling technique for the laptop versus longhand study. For example: • The researchers would determine the strata for the student population across the educational psychology course (1) and then select student participants to meet the proportions in each stratum, such as the different ethnicities taking the university course (1). Look for other reasonable marking points. Answers must relate to the scenario. Generic answers score 0 marks	(2)

Question Number	Answer	Mark
2(b)	AO2 (1 mark), AO3 (1 mark) Candidate responses have to be drawn from evidence presented in Table 3. One mark for identification of a conclusion (AO2). One mark for justification of the conclusion (AO3). For example: • The participants taking longhand notes performed better on image-related content than those taking notes on their laptop (1) which is shown by a 14% higher score on the image-related questions on average for those taking longhand notes compared to the laptop note-taking group (1). Look for other reasonable marking points. Answers must relate to the scenario. Generic answers score 0 marks.	(2)

Question Number	Answer	Mark
2(c)	AO2 (1 mark), AO3 (1 mark) One mark for comparing the observed/calculated value with a relevant critical value (AO2). One mark for justification of what this means for the findings of the study (AO3). For example: • The calculated value (84) is less than the critical value (86) at the 1% level of significance for a two-tailed test (1). This means that there is a significant difference in the overall performance on the test between the laptop note-taking group and the longhand group (1). Look for other reasonable marking points.	(2)

Question Number	Answer	Mark
2(d)	AO2 (1 mark), AO3 (1 mark) One mark for identification of a strength of using a field experiment for the laptop versus longhand study (AO2). One mark for justification of the strength of using a field experiment for the laptop versus longhand study (AO3). For example: • By using a field experiment the students would show real life behaviour when note-taking, so the researchers would have increased the ecological validity (1) because the students would have acted naturally when taking notes by laptop or longhand as they are in their usual lecture theatre, studying content from their educational psychology course (1). Look for other reasonable marking points. Answers must relate to the scenario. Generic answers score 0 marks.	(2)

Question Number	Answer	Mark
2(e)	AO2 (2 marks), AO3 (2 marks) One mark for identification of each improvement in relation to the laptop versus longhand study (AO2). One mark for justification of each improvement (AO3). For example: • The researchers could have asked participants from different universities across the USA to take the notes, rather than just those from a single university (1) because this would have enabled them to generalise their results to the whole of America as they would have a more representative sample of students when taking notes using a laptop or longhand (1). • The researchers could have ensured the method of note-taking assigned to them was the usual method used by the student (1) as this would enable them to compare the true performance of the different forms of note-taking as the student would be already be familiar with the method assigned, increasing the validity of their findings (1). Look for other reasonable marking points. Answers must relate to the scenario. Generic answers score 0 marks.	(4)

Section B: Review of studies

Question Number	Answer	Mark
3(a)	AO2 (1 mark), AO3 (1 mark) One mark for identification of a weakness of using a meta-analysis for the screen advertising and children study (AO2). One mark for justification of the weakness (AO3). For example: • The 16 studies included in the meta-analysis are likely to have used different methodology so this reduces the test-retest reliability of the study investigating screen advertising (1) because comparisons between the results found regarding the effect of screen adverts on children will be difficult as there will be a lack of replication in the procedures, meaning the researchers cannot directly test for consistency (1). Look for other reasonable marking points. Answers must relate to the scenario. Generic answers score 0 marks.	(2)

Question Number	Answer	Mark
3(b)	AO2 (3 marks), AO3 (3 marks) Up to three marks for application of learning theories to the findings of the screen advertising and children study (AO2). Up to three marks for judgement/justification of research evidence in relation to the study (AO3). Application of learning theories to the study (AO2) For example: • Children watching screen advertising could have observed a role model on the internet or TV adverts and then imitated their actions when they were eating which could account for the average 60 calories more for those who witnessed food advertising compared to the control group. • The children repeatedly watching food advertising on screens may have formed an association between the UCS of food and an NS/CS of the advert which led to a UCR/CR of pleasure so were more likely to seek out food after watching the adverts compared to those exposed to non-food advertising who may have formed this association for toys instead and so could account for the increased BMI in the study. • The children in the food group may have gained positive reinforcement from eating the food after watching the screen adverts so this encouraged them to continue to eat after watching food adverts, accounting for the increased calorie intake and BMI, compared to the non-food advertising group who may have gained pleasure from toys instead. Judgement/justification of how far research evidence can account for the findings of the study (AO3) For example: • Bandura (1963) found that children would model aggressive behaviour observed on TV by both a human and cartoon cat so could support how children who watch food-based screen adverts would imitate consuming the food and increasing their calorie consumption compared to the non-food advert group. • Pavlov (1927) showed that dogs could be conditioned to salivate to various stimuli, such as a metronome, when being paired with food which could support how children may have formed an association between food and the adverts, which leads to the adverts triggering food seeking in the children and account for the increased BMI over time. • Research from biological psychology, such as Olds and Milner (1954), could equally account for eating more calories after watching food-based adverts as pleasurable behaviours of eating food would activate the dopamine reward pathway and also emotional centres such as the amygdala which would strengthen the desire to consume	(6)

	more food in future so may explain the increased BMI too. Look for other reasonable marking points. Answers must relate to the scenario. Generic answers score 0 marks.	

Question Number	Indicative content	Mark
4	AO1 (6 marks), AO3 (10 marks) AO1 • In Rosenhan (1973) there were eight pseudopatients who went to 12 hospitals across the USA which varied with age and funding. • The pseudopatients in Rosenhan (1973) were all asked to say they could hear the same words 'empty', 'hollow', and 'thud' when they went to the hospital. • When at the hospital, the pseudopatients in Rosenhan (1973) were asked to record the behaviour of the staff and other patients in the hospital. • Baddeley (1966b) tested the acoustic and semantic coding in the long-term memory by asking participants to remember the order of a list of words and excluded participants who failed a listening test in experiment one. • In his study, Baddeley (1966b) implemented a number of controls, such as the same four lists of words, and precise timings such as for writing down the words seconds and on the intervening filler task. • Baddeley (1966b) concluded that short-term memory and long-term memory largely coded information differently, with the STM relying largely on acoustic encoding and the LTM using semantic coding heavily. AO3 • The decision to study staff behaviour in a variety of real hospitals is a somewhat holistic approach to considering the reliability and validity of diagnoses compared to a laboratory situation, so this reduces the scientific nature of the study. • By asking all the pseudopatients to say the same thing when presenting themselves to the hospitals there is a standardised approach which increased reliability, so this is to some extent scientific. • Rosenhan's (1973) study was reportedly measuring the reliability and validity of diagnosis, but by asking healthy people to lie about having mental health symptoms means that the doctors were deceived and the study may therefore not actually be testing this hypothesis, so this reduces the scientific rigour of the study. • Rosenhan's (1973) study may be considered less scientific as the pseudopatients were asked to take their own notes whilst in the hospitals and there is the possibility that they could have been biased in what they chose to report so there is subjectivity. • The pseudopatients in Rosenhan's (1973) study used	(16)

	direct observation of the staff behaviour and interactions with patients and recorded these quantitatively so could be considered empirical to some extent and therefore somewhat scientific. • Isolating acoustic and semantic coding in Baddeley's (1966b) study is a reductionist way to assess memory, so is considered more scientific. • Baddeley (1966b) used findings from his earlier 1966a study regarding STM to make hypotheses about what would happen in LTM, and refined this throughout the three experiments in 1996b study, so this is a scientific approach. • The use of controls in Baddeley's (1966b) study such as the lists of words and timings means that there was a standardised approach which increased reliability and therefore is considered more scientific. • By using a laboratory setting and removing participants who could not pass the listening test in experiment one, Baddeley (1966b) was excluding extraneous variables so could be more confident in inferring cause and effect, so his study is considered more scientific. • The process of simplifying memory into the short term and long-term memory and concluding it is coded differently is a reductionist approach and therefore more scientific. Look for other reasonable marking points.	

Level	Mark	Descriptor
AO1 (6 marks), AO3 (10 marks) Candidates must demonstrate a greater emphasis on evaluation/conclusion vs knowledge and understanding in their answer. Knowledge & understanding is capped at maximum 6 marks.		
Level 0	0	No rewardable material.
Level 1	1–4 marks	Demonstrates isolated elements of knowledge and understanding. (AO1) A conclusion may be presented, but will be generic and the supporting evidence will be limited. Limited attempt to address the question. (AO3)
Level 2	5–8 marks	Demonstrates mostly accurate knowledge and understanding. (AO1) Candidates will produce statements with some development in the form of mostly accurate and relevant factual material, leading to a superficial conclusion being made. (AO3)
Level 3	9–12 marks	Demonstrates accurate knowledge and understanding. (AO1) Arguments developed using mostly coherent chains of reasoning leading to a conclusion being presented. Candidates will demonstrate a grasp of competing arguments but evaluation may be imbalanced. (AO3)
Level 4	13–16 marks	Demonstrates accurate and thorough knowledge and understanding. (AO1) Displays a well-developed and logical evaluation, containing logical chains of reasoning throughout. Demonstrates an awareness of competing arguments, presenting a balanced conclusion. (AO3)

Section C: Issues and Debates

Question Number	Indicative content	Mark
5	AO1 (4 marks), AO2 (4 marks), AO3 (4 marks) AO1 • Multi store model states that to remember information in the long term someone needs to pay attention to it and then rehearse it. • Schema theory states memory for events rely on schemas which are packets of knowledge about how an event usually happens and so where there are gaps in recall, people use their schema to fill in the gaps. • Reconstructive memory assumes people hold stereotypes that can affect the accuracy of the memory as these are used to reconstruct events which can be inaccurate. • Episodic memory is for personal experiences and are linked to the place and time that they happened but are prone to being transformed or interfered with, leading to forgetting. AO2 • Anthony may not have been paying attention and rehearsed what the cake looked like at the party, which is why he misremembered it as having candles and Carli's name. • Anthony may have a schema that birthdays have balloons and cakes with candles so where he could not remember he filled in the gaps in his recall with these details consistent with his schema for birthday parties. • Anthony may have a stereotype of girls at a birthday party having pink balloons and wearing a dress, which he has incorporated into his memory of Carli's party, but this is an inaccurate reconstruction of the events. • Anthony may have difficulty in remembering the cake, candles, and what people were dressed like as he is at college so his episodic memory for the birthday party may have been interfered with or transformed. AO3 • Peterson and Peterson (1959) showed how preventing rehearsal using an interference task led to the majority of trigrams being forgotten after 18 seconds so supports the importance of rehearsal in keeping information so could account for Anthony misremembering the cake.	(12)

	• Research into cognitive psychology commonly uses artificial tasks using word lists and trigrams which are not everyday uses of memory and so may not represent human everyday memory for conversations and important dates, so may not account for Anthony's memory of the party. • Bartlett (1932) supported reconstructive memory, including schema theory, with the War of the Ghosts story where participants transformed details such as canoes to boats and rationalised details to make it fit with their schema, so could support why Anthony misremembered Carli's party. • Biological psychology may also explain why Anthony got angry and knocked the mobile phone out of Carli's hand due to higher levels of testosterone in Anthony as he is male and this could have made him act more impulsively and aggressively. Look for other reasonable marking points.	

Level	Mark	Descriptor
AO1 (4 marks), AO2 (4 marks), AO3 (4 marks) Candidates must demonstrate an equal emphasis between knowledge and understanding vs application vs evaluation/conclusion in their answer.		
Level 0	0	No rewardable material.
Level 1	1–3 marks	Demonstrates isolated elements of knowledge and understanding. (AO1) Provides little or no reference to relevant evidence from the context (scientific ideas, processes, techniques & procedures). (AO2) A conclusion may be presented, but will be generic and the supporting evidence will be limited. Limited attempt to address the question. (AO3)
Level 2	4–6 marks	Demonstrates mostly accurate knowledge and understanding. (AO1) Line(s) of argument occasionally supported through the application of relevant evidence from the context (scientific ideas, processes, techniques & procedures). (AO2) Candidates will produce statements with some development in the form of mostly accurate and relevant factual material, leading to a superficial conclusion being made. (AO3)
Level 3	7–9 marks	Demonstrates accurate knowledge and understanding. (AO1) Line(s) of argument supported by applying relevant evidence from the context (scientific ideas, processes, techniques & procedures). Might demonstrate the ability to integrate and synthesise relevant knowledge. (AO2) Arguments developed using mostly coherent chains of reasoning. Leading to a conclusion being presented. Candidates will demonstrate a grasp of competing arguments but evaluation may be imbalanced. (AO3)
Level 4	10–12 marks	Demonstrates accurate and thorough knowledge and understanding. (AO1) Line(s) of argument supported throughout by sustained application of relevant evidence from the context (scientific ideas, processes, techniques or procedures). Demonstrates the ability to integrate and synthesise relevant knowledge. (AO2) Displays a well-developed and logical evaluation, containing logical chains of reasoning throughout. Demonstrates an awareness of competing arguments, presenting a balanced conclusion. (AO3)

Question Number	Indicative content	Mark
6	AO1 (8 marks), AO3 (12 marks) AO1 • The debate is concerning the extent to which psychology could be used as a form of social control, to help retain order but could be to exert undue control over citizens. • Raine et al. (1997) used PET scans to examine the activity of the brains of 41 people charged with murder and found differences in their scans compared to control participants. • Watson and Rayner (1920) reported that Little Albert showed fear to the rat and other stimuli over a period of time due to the association with the loud noise which caused fear (the UCR / CR). • Advertising or public health messages can be considered a form of classical conditioning through association of a product to positive outcomes. • Aversion therapy is a treatment which uses classical conditioning principles to attempt to socially control/minimise drug use. • Phobias can be treated using systematic desensitisation which is a form of control using relaxation techniques paired with the phobic stimulus. • Drug therapy can be used to give people powerful chemicals which can be a form of social control for mental health issues or addiction. • Social learning theory states that people copy their role models so can promote the use of censorship which is a form of social control. AO3 • If psychology is used to harm people then this would lead to diminished respect, application and use of psychological knowledge which could mean people miss out on helpful aspects of psychological research. • The findings from Raine et al. (1997) could be used to screen the population and restrict the freedom of people who have similar brain activity to murderers which may be unnecessary incarceration. • Using brain scanning to identify potential criminals could lead to interventions being put in place which could help prevent serious crimes like murder. • As Watson and Rayner (1920) found a child could be conditioned to fear various stimuli, this could be used to	(20)

	condition society to buy products / link to advertising. • Society may benefit from advertising public health messages using classical conditioning such as the association between not smoking and better health so can lead to increased life expectancies and less disease. • Aversion therapy has been used to reduce alcohol dependency by using an emetic drug to cause sickness, so can reduce alcohol misuse in society and improve productivity and decrease alcohol related illness and death. • Aversion therapy has been misused as a supposed 'cure' for homosexuality by forcing individuals to experience unpleasant unethical experiences like electric shocks being paired with pornography. • The use of systematic desensitisation is more ethical than flooding as a measure of social control as the patient/client has control over how quickly they move through the therapy and if they go back a step. • Use of systematic desensitisation can help with the removal of phobias such as agoraphobia which can help someone socialise again and go back to work, benefiting the economy thorough productivity and taxes. • Drugs for mental health can cause sedation and restrict what behaviours people show which controls their behaviour to a list of acceptable behaviours which those in power control what is allowable in society. • Methadone drug treatment has been used to help stabilise heroin addiction and over time can help reduce number of drug deaths and diseases through sharing dirty needles, such as HIV or hepatitis-C. • Censorship of media can be used to prevent people becoming desensitised to violent and aggressive behaviour which social learning theory suggests they may imitate, so can potentially reduce violence in society. • Censorship of media can be used as a form of propaganda to control a society's understanding of major world issues and misinform them of atrocities and can then lead to groups being blamed and victimised unfairly. Look for other reasonable marking points.	

Level	Mark	Descriptor
AO1 (8 marks), AO3 (12 marks) Candidates must demonstrate a greater emphasis on assessment/conclusion vs knowledge and understanding in their answer. Knowledge & understanding is capped at maximum 8 marks.		
Level 0	0	No rewardable material.
Level 1	1–4 marks	Demonstrates isolated elements of knowledge and understanding. (AO1) Generic assertions may be presented. Limited attempt to address the question. (AO3)
Level 2	5–8 marks	Demonstrates mostly accurate knowledge and understanding. (AO1) Candidates will produce statements with some development in the form of mostly accurate and relevant factual material, leading to a generic or superficial assessment being presented. (AO3)
Level 3	9–12 marks	Demonstrates accurate knowledge and understanding. (AO1) Arguments developed using mostly coherent chains of reasoning, leading to an assessment being presented which considers a range of factors. Candidates will demonstrate understanding of competing arguments/factors but unlikely to grasp their significance. The assessment leads to a judgement but this will be imbalanced. (AO3)
Level 4	13–16 marks	Demonstrates accurate and thorough knowledge and understanding. (AO1) Displays a logical assessment, containing logical chains of reasoning throughout which consider a range of factors. Demonstrates an understanding of competing arguments/factors but does not fully consider the significance of each which in turn leads to an imbalanced judgement being presented. (AO3)
Level 5	17–20 marks	Demonstrates accurate and thorough knowledge and understanding. (AO1) Displays a well-developed and logical assessment, containing logical chains of reasoning throughout. Demonstrates a full understanding and awareness of the significance of competing arguments/factors leading to a balanced judgement being presented. (AO3)